HP sp400 Series Template Design Software

User Guide

For use with the
HP Handheld All-in-One

Copyright information

(c) Copyright 2008 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Trademark credits

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

Document 800c0d4b
Revision A: March 2008

Contents

1 About this document

Intended audience 4
Additional HP sp400 series All-in-One documents 4
System requirements 4

2 Overview of the Software

The HP sp400 Series Template Design Software 5

3 Using the HP sp400 Series Template Design Software

Connect the All-in-One 6
Create a print template 6
Select template settings 6
Create static text fields 7
Create dynamic text fields 8
Add images 8
Save the print template on your computer 9
Test print the template 9
Save the print template on the All-in-One 9
View and/or delete templates stored on the printer 9
Use the default print templates 10

4 Advanced use

Save template as HHP files 12
Use memory wisely 13

5 Troubleshoot problems and get support

Troubleshoot 15
Support services 17

1 About this document

Intended audience

This document is intended to be used by system administrators and others experienced in working with server applications. This document will be used in concert with the HP sp400 Series Template Design Software to create print templates for the HP Handheld All-in-One. The HP sp400 Series Template Design Software is available at www.hp.com/support/handheldsp400aio.

Additional HP sp400 series All-in-One documents

- For general instructions for using and maintaining the All-in-One, see the *HP Handheld sp400 series All-in-One Scanner Printer System Administrator Guide*.
- For help configuring your organization's server to work with the All-in-One, see the *HP sp400 Series Configuration Software User Guide*.
- For information about implementing the server application, see *Communication Protocols*.

All of these documents are available at www.hp.com/support/handheldsp400aio.

System requirements

- All-in-One device and accessories
- Wireless network and server application
- Computer with the following installed on it:
  - Windows® XP and Service Pack 2
  - Microsoft® .NET Framework 3.0 or later
- USB-compliant cable that does not exceed three meters (10 feet) in length, with a type B 5-pin plug at one end to connect to the All-in-One's port

NOTE: If you connect to the internet to install the software and you do not have .NET Framework installed on your computer, .NET Framework will automatically be downloaded and installed.

2 Overview of the Software

The HP sp400 Series Template Design Software

The HP sp400 Series Template Design Software is a tool for creating print templates for use with the HP Handheld All-in-One. A print template contains a complete description of what the printed output from the All-in-One will contain. This printed output may contain static (non-changing) images and text, as well as dynamic text that may change with each print based on information received from an external source, such as a wireless server application.

The Template Design Software can be used to create and store one or more templates on the All-in-One. After the desired templates have been created and stored on the All-in-One, the Template Design software will only be needed when changes to the design of the printed output are desired.

In addition to saving the templates on the All-in-One using the Template Design Software, print templates can be shared wirelessly with one or more All-in-One devices using a wireless server application.

The All-in-One comes from the factory with four default print templates. These default print templates can be used to communicate information about the All-in-One or they can be adapted for your printing needs.

3 Using the HP sp400 Series Template Design Software

Connect the All-in-One

If you have not already connected the All-in-One on your computer, do that now, following the instructions in the *HP sp400 Series Configuration Software User Guide*. This user guide is available to download at www.hp.com/support/handheldsp400aio.

Create a print template

Use the software to design print templates for the All-in-One.

1. If you have not already downloaded and installed the HP sp400 Series Template Design Software, do that now. It is available at www.hp.com/support/handheldsp400aio.

   NOTE: Microsoft .NET Framework 3.0 or later must be installed on your computer in order for you to install and use the HP sp400 Series Template Design Software. If you connect to the internet to install the software and you do not have .NET Framework installed on your computer, .NET Framework will automatically be downloaded and installed.

2. Open the software. The program will open a blank template.
3. Add static and/or dynamic text fields. See "**Create static text fields**" and "**Create dynamic text fields**."

Select template settings

1. Click **Template→Settings**.
2. In the **Print Mode** box, select **Normal** or **Fast Dry**.

   NOTE: The print mode setting controls the length of time the print takes to dry. Select **Fast Dry** if you will be printing on plastic sleeves or on other non-porous material.

3. Enter a width for your new template in the Template Width box.
4. Press **OK**.

Create static text fields

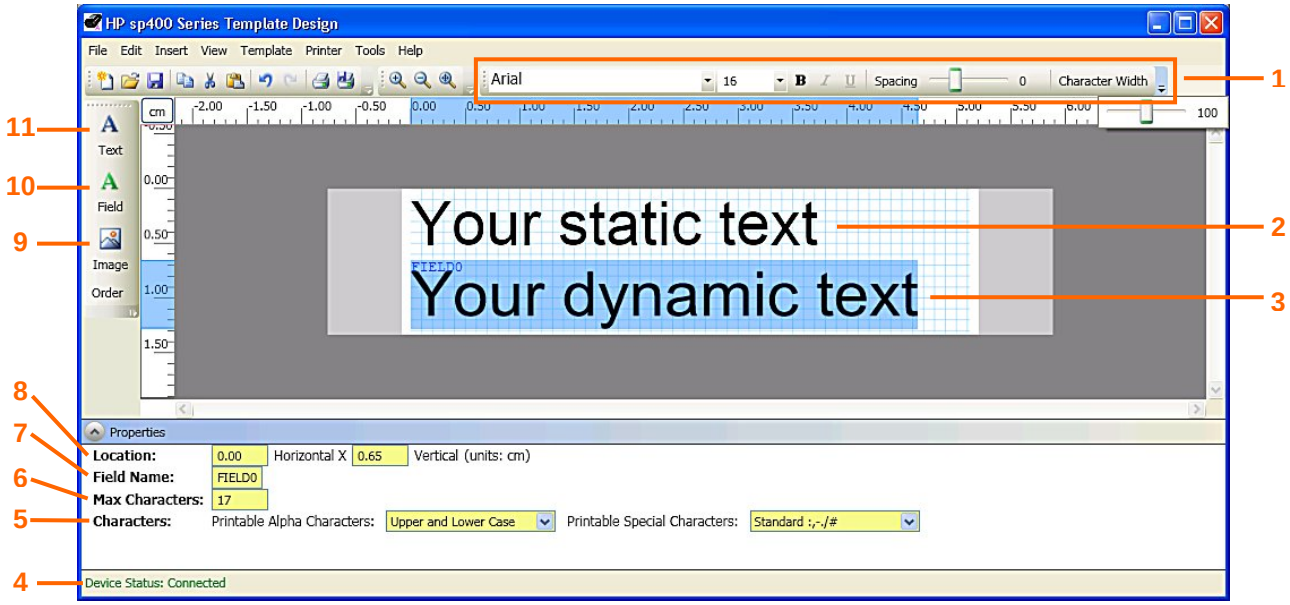

Figure 3-1. HP sp400 Series Template Design Software window

1	Font toolbar, including the **Spacing** and **Character Width** sliders	6	**Max Characters** box—only available for dynamic text fields
2	Example of a static text field	7	**Field name** box—only available for dynamic text fields
3	Example of a dynamic text field that has been selected by the user	8	**Location** values
4	Device Status	9	**Insert Image** button
5	**Printable Alpha Characters** and **Printable Special Characters** boxes—only available for dynamic text fields	10	**Insert Dynamic Text Field** button
		11	**Insert Static Text Field** button

Static text is text that will always appear on each print. To create a static text field, do the following:

1. Select **Insert→Static Text Field** or click the **Insert Static Text Field** button.
2. Change the font settings using the font toolbar located at the top of the window. Any changes you make to the font settings will affect all of the text in the text field.
3. Adjust the spacing and character width by moving the sliders to the right or left. You may have to click the pull-down menu on the right side of the toolbar to access the spacing and character width controls.
4. Move the location of the text field on the print template in one of two ways:
   - Drag the text field with the mouse.
   - Change the **Location** values in the Properties list located in the lower portion of the window.

Create dynamic text fields

Dynamic text is text that is controlled by a server over the wireless network. To create a dynamic text field, do the following:

1. Select **Insert→Dynamic Text Field** or click the **Insert Dynamic Text Field** button.
2. Modify the text by double-clicking in the text field that you created and then selecting “Text” and typing.

   NOTE: The text that you enter is only an example of what might be printed in this field. The server application will send the actual text string that will be printed in this field.

3. Change the font settings using the font toolbar located at the top of the window. Any changes you make to the font settings will affect all of the text in the text field.

   NOTE: A limited number of fonts are available for use in dynamic text fields.

4. To move the location of a text field on the print template, select the text field and then do one of the following things:
   - Drag the text field with the mouse.
   - Change the **Location** values in the Properties list located in the lower portion of the window.
5. Enter a field name in the **Field Name** box in the Properties list located in the lower portion of the window. The field name is the name that the server will use to identify this field. It must be unique and include no spaces.

IMPORTANT:

- The field name given to a dynamic text field must match the field name used by the server.
- The field name given to a dynamic text field must be unique and include no spaces.

6. Type a new value in the Max Characters box to specify the maximum number of characters that can be printed in this field.
7. Select the type of characters that will be printed in this field by clicking the arrow next to the Printable Alpha Characters and Printable Special Characters boxes.

   NOTE:

   - Numbers are always available for all text fields. Changing the settings in the Printable Alpha Characters and the Printable Special Characters boxes only places limits on the alpha characters (letters) and special characters.
   - Reducing the variety of characters that are available for use in a dynamic text field reduces the amount of memory the All-in-One requires to store fonts.

Add images

Add images if desired:

1. Select **Insert→Image** or click the **Insert Image** button.
2. Find and select the image you wish to add.
3. Change the location of the image by dragging the image or changing the Location values as you would do to move a text field.
4. To change the size of an image, select the image and change the Size settings in the Properties list or click and drag from the lower right-hand corner of the image.

Save the print template on your computer

Print templates can be saved as HPL files on your computer while you are working on them.

1. Click **File → Save**.
2. Use the **Save in** drop-down menu to select a location on your computer to save the print template.
3. Type a name for the print template in the **File name** box. Make sure this name matches the name used by the server application.
4. Click **Save**.

The print template will be saved as an HPL file in the location you specified.

When you open an HPL file that you have saved on your computer, the HP sp400 Series Template Design Software will automatically open to display the print template. The print template can then be modified or saved on the All-in-One.

Test print the template

To test print your new template, do the following:

1. Turn on the All-in-One if it is not already on.
2. Connect the All-in-One to the computer with a USB cable.
3. Click **Printer→Test Print Template**. The All-in-One will emit a Hi tone when it is ready to print.
4. Print the template.

Save the print template on the All-in-One

Be sure to save your completed template on the All-in-One:

1. Click **Printer→Save Template to Printer** button. The Template Name Dialog box appears.
2. Enter a name for the template. Make sure this name matches the name used by the server application.

IMPORTANT: When saving a print template on the All-in-One, make sure the name matches the name that will be used by the server application to identify this template.

NOTE: The template can also be saved as a demonstration template to be used when the printer is in Demonstration (non-wireless) mode by clicking **Printer→Save Template as Non-Wireless Demo Template**.

View and/or delete templates stored on the printer

To view your saved templates or to delete them, do the following:

1. Click **Printer→Print Manager**. A list is displayed with all templates installed on the All-in-One. The list is categorized into wireless and non-wireless templates.
2. If you want to delete a template or templates, select one or more templates and click **Delete Selected Template(s)**.

   NOTE: If you selected one or more of the system information or diagnostic templates, a System Information Deletion warning will appear and ask you to confirm or cancel this action. If you delete one of these templates, you may not be able to perform some printer diagnostic functions.

   The system information and diagnostic templates can be restored to the device using the HP sp400 Series Configuration Software.

Use the default print templates

The All-in-One comes from the factory with four default print templates installed on it.

There are three non-wireless templates for use in Demonstration mode (where a wireless connection is not used):

- System Information print template
- sp400 Demonstration print template
- Pen Diagnostic print template

There is one wireless print template (for use with a wireless connection):

- sp400 Default (wireless) print template

To turn the All-in-One on in Demonstration mode, press the **CLEAR** button while pressing the **Power** button.

To select the default print templates on the All-in-One while in Demonstration mode, press the **CLEAR** button. You will hear one Hi tone when the system information template is selected, two when the sp400 Demonstration template is selected, and three when the Pen Diagnostic template is selected, and so on. Scan a barcode to print the selected print template.

The All-in-One can save up to seven user-defined demonstration print templates if sufficient memory is available on the All-in-One.

The System Information print template and the Pen Diagnostic print template contain information that is useful to service technicians when problems arise.

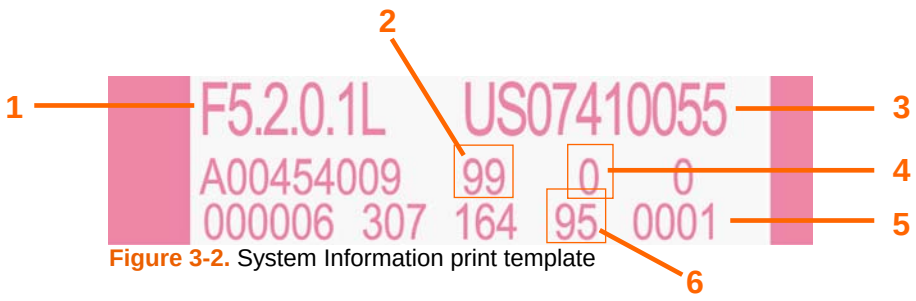

Figure 3-2. System Information print template

1 FW version

2 Ink remaining % (estimate)

3 Serial number

4 Image count on print cartridge

5 Image count since power turned on

6 Battery level %

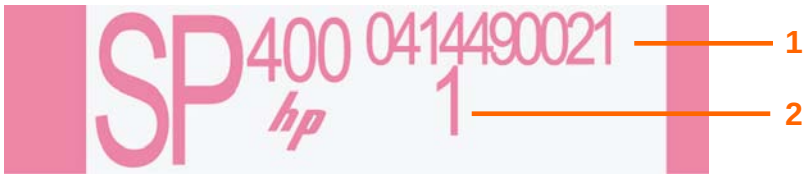

Figure 3-3. sp400 Demonstration print template

1 Upper base alphanumeric value of scanned bar code (truncated to 10 digits)

2 Print templates printed

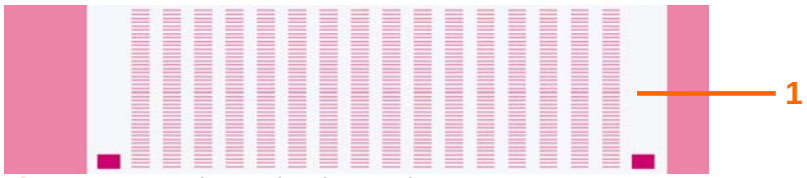

Figure 3-4. Pen Diagnostic print template

1 This area displays diagnostic information about print cartridge health

Figure 3-5. sp400 Default (wireless) print template

1 FIELD1

2 FIELD2

4 Advanced use

Save template as HHP files

When you save print templates on your computer using **File → Save**, they are saved as HPL files. Templates should be saved using this file format if they will be viewed and edited with the Template Design software at a later date.

IMPORTANT: You must save your template as an HPL file if you want to be able to reopen and edit it with the Template Design software. Exported HHP files cannot be reopened for later editing with the Template Design software.

Templates can also be saved in a file format known as an HHP file. Templates saved as HHP files can be shared with the HP sp400 Series Configuration Software and the server to update the All-in-One. Only templates saved as HHP files can be transferred wirelessly.

When a template is saved in HPL format, only one file is created, while if a template is saved in HHP format, a collection of up to three files is created.

1. Open or create a template using the HP sp400 Series Template Design Software.
2. Click **File→Export Template as HHP Files**.
3. Browse to a folder where you want to save the files and click **OK**.
4. Enter a name for the template and click **OK**.

NOTE: This will save the template as HHP files in the specified folder. Up to three HPP (.hhp) files will be created, depending on what is included in the template design.

The template can now be deployed to one or many All-in-One devices through a wireless server application or through the HP sp400 Series Configuration Software.

Use memory wisely

When you design a print template, remember that the All-in-One has a fixed amount of memory. The fonts and other attributes you choose for your dynamic text fields and the placement of dynamic text fields in the print template have a significant effect on the amount of memory your template will require.

To make the most efficient use of the memory available on the All-in-One, observe the following rules:

- When two or more dynamic text fields will be placed horizontally beside each other, place them at the exact same vertical location and use the same font name, font style, font size, spacing and character width. This will result in only one font being stored on the All-in-One. See **Figure 4-6** and **Figure 4-7**.
- Limit the number of characters that are available for use in your dynamic text field by making selections in the Printable Alpha Characters and Printable Special Characters boxes in the Properties list located in the lower portion of the window. For example, if only numbers will be printed in this field, set the Printable Alpha Characters to **None** and the Printable Special Characters to **None**.

NOTE: For every unique combination of the following attributes in a dynamic text field, a font will be stored on the All-in-One:

- Vertical location
- Font name
- Font style
- Font size
- Spacing
- Character width

Dynamic text fields can have different horizontal locations without creating additional unique fonts, so it is possible to have many dynamic text fields on one template that share only one font.

NOTE: You may place static text fields in different vertical locations and use different text styles, sizes, and other text attributes for static text fields without affecting the amount of memory used on the All-in-One.

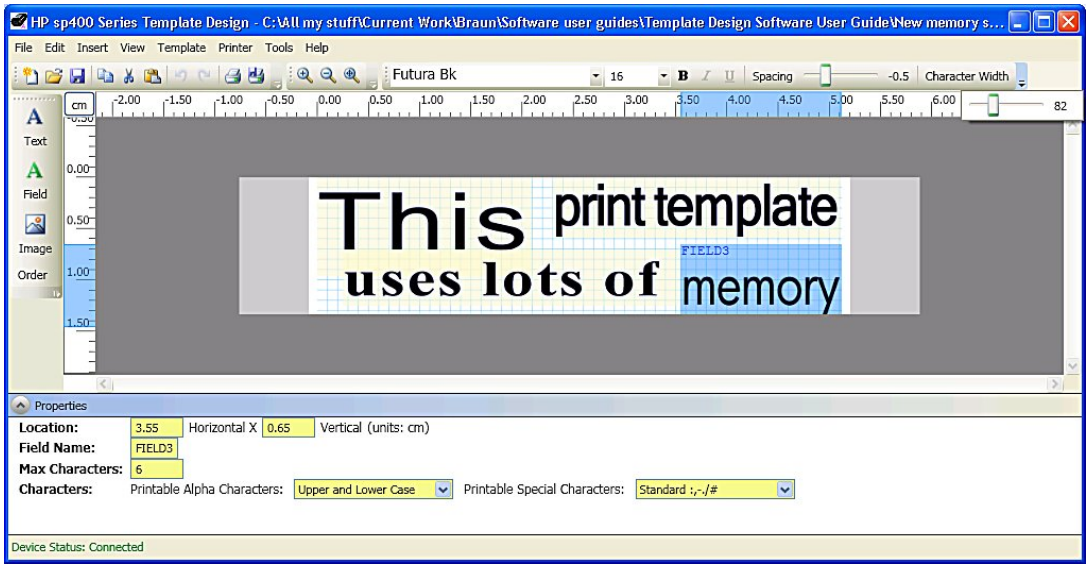

Figure 4-6 An example of a print template (made up of four dynamic text fields) that requires the storage of four unique fonts on the All-in-One. The text fields in this print template use four different font names and are each in a different vertical position. The text fields also differ in font style, font size, spacing, and character width.

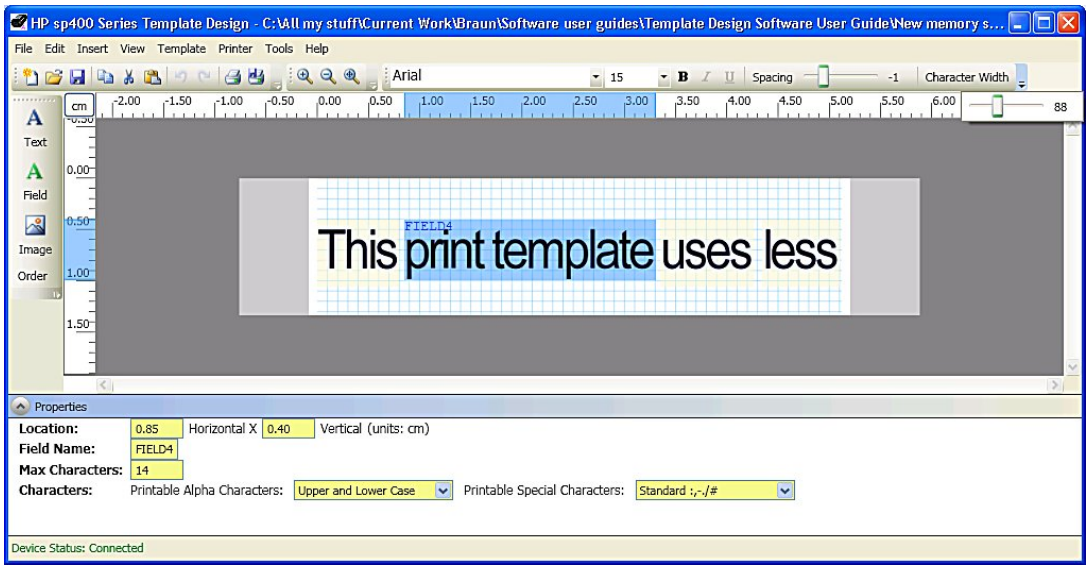

Figure 4-7 An example of a print template (made up of four dynamic text fields placed beside each other) that requires the storage of only one unique font on the All-in-One. All four text fields are aligned vertically and they all share the same font name, font style, and other attributes.

5 Troubleshoot problems and get support

Troubleshoot

Table 5-1 General problems

Problem	Cause	Solution
Device status reads “Not connected”	The All-in-One is not turned on.	Turn the All-in-One on by pressing the green **Power** button for three seconds.
	The USB cable is not securely connected to the computer or the All-in-One.	• Press the plug into the All-in-One to make sure it is connected. • Unplug the cable from the USB port and plug it in again.

Table 5-2 Errors

Problem	Cause	Solution
An error appears that says “The printer is not connected”	The All-in-One is not turned on.	Turn the All-in-One on by pressing the green **Power** button for three seconds.
	The USB cable is not securely connected to the computer or the All-in-One.	• Press the plug into the All-in-One to make sure it is connected. • Unplug the cable from the USB port and plug it in again.
	The FTDI drivers are not installed.	Locate the drivers in the FTDI folder in the HP sp400 Series Configuration Software folder and install them on the All-in-One. For instructions, see the HP sp400 Series Configuration Software User Guide, available at www.hp.com/support/handheldsp400aio.
An error appears that says “USB communication error”	USB communication failed.	Wait a few seconds and retry.
An error appears that says "The memory on the printer is full"	Too many templates are stored on the device.	1 Use the print manager (**Printer→Print Manager**) to delete one or more templates from the All-in-One and retry. 2 Repeat this process as needed.
	The printer memory is fragmented.	1 Delete all the templates from the printer. (Deleting the System Information and Diagnostic templates is not required.) 2 Save the desired templates on the All-in-One.
	The template you are saving contains too many dynamic fields.	Delete one or more of the dynamic fields and retry.

Table 5-3 Problems with the software

Problem	Cause	Solution
Not able to edit the order of elements on the template design because the menu items are grayed out	The element you are trying to change the order of is a dynamic text field. Dynamic text fields are always printed on top of all other elements and cannot be reordered.	Select an element that is not a dynamic text field.
Not able to change the field name of a dynamic field	The field name you have chosen is not different from all other field names on the template.	Use a name that is not used by any other dynamic fields on the template.
	The field name chosen does not follow naming rules.	Use a name that is not blank and does not contain any spaces.
Not able to place elements on the template where desired	**Snap to Grid** setting is enabled	Click **Tools→Preferences**, clear the **Snap to Grid** box and press **OK**.
Test Print does not work	The All-in-One is not turned on.	Turn the All-in-One on by pressing the green **Power** button for three seconds.
	The USB cable is not securely connected to the computer or the All-in-One.	• Press the plug into the All-in-One to make sure it is connected. • Unplug the cable from the USB port and plug it in again.
	The All-in-One is in wireless mode, but is not able to connect to the wireless network (the blue light is flashing).	Turn on the All-in-One in Demonstration mode (non-wireless mode). See "**Use the default print templates**" for instructions.

Table 5-4 Problems printing

Problem	Cause	Solution
The All-in-One does not print all characters sent to it by the server application	Max Characters is set too low for the dynamic field on the template.	1 Open the template in the Template Design software. 2 Increase the Max Characters setting for the field in question. 3 Resave the template on the All-in-One.
	The server is sending characters that are not included in the font set stored on the All-in-One.	1 Open the template in the Template Design software. 2 Make sure that your selections in the Printable Alpha Characters drop-down box and the Printable Special Characters drop-down box for the dynamic text field(s) in question include the characters that you are trying to print. 3 Resave the template on the All-in-One.

Support services

If you have a problem, follow these steps:

1. Check the documentation that came with the product.
2. Visit the HP online support Web site at www.hp.com/support/handheldsp400aio. Online support is available to all HP customers. It is the fastest source for up-to-date device information and assistance and includes the following features:
   - Access to qualified online support specialists
   - Valuable product and troubleshooting information for common problems
3. Call HP support: 1-800-HP Invent (800-474-6836). Support options and availability vary by device, country/region, and language.